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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,092	04/03/2001	Yoshitaka Nagao	35.C15264	9326

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EXAMINER

COLE, ELIZABETH M

ART UNIT PAPER NUMBER

1771

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,092

Applicant(s)

NAGAO ET AL.

Examiner

Elizabeth M Cole

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-- **Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-29 is/are pending in the application.
- 4a) Of the above claim(s) 23-27, 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-22 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. Applicant's traversal of the inclusion of claims 23-24 has been considered. However, restriction is not required if the examiner chooses to group the apparatus with the method claims as best examinable with the method. Thus, the request to withdraw the restriction as to claims 23 and 24 is not persuasive. With regard to the restriction between claim 29 and group I, the claims are related as intermediate/final product. In the instant case, the intermediate is useful as a flame resistant insulating material. Additionally, it is noted that the restriction requirement was made final in the previous action based on the arguments which were presented by Applicant in response to the written requirement.
2. Claims 1-7, 9-22, and 28 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed does not disclose the flame resistive fiber has a sheet-like shape.
3. Claims 1-7, 9-22 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claimed structure is unclear. In claim 1, it is not clear what is meant by a fiber having "a sheet-like shape". Does this refer to a flat or ribbon fiber, or does it refer to the shape of a plurality of fibers. Additionally, what is meant by sheet-like, i.e., how would either the fiber or plurality of fibers be similar to and/or different from a sheet? Also, it is not clear how an individual fiber can be impregnated with a waterproofing layer, as the fiber is

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not described as being porous. Does this mean that the individual fiber itself is impregnated with a resin or does this mean that a plurality of fibers are impregnated? It seems that a plurality of fibers are impregnated rather than a single fiber.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 14-15, 21-22, 28 are rejected under 35 U.S.C. 102(b) as being anticipated by

GB 1,358,345. GB '345 discloses a roofing material comprising a fiber glass sheet which corresponds to the fire resistant material and layer which may be coated on one face with an adhesive which corresponds to the waterproofing layer. The adhesive layer may bond a facing material such as a film layer or other moisture impervious materials. The adhesive may comprise a polyvinyl material which are known to be thermoplastics. The material may be transported in roll form. See p. 3, lines 98 - p. 4, line 95 and page 4, lines 122-126 and figure 6. Since the material may be formed into a roll, it is flexible.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 4-7, 9, 12-13, 18-20, are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1,358,345 in view of Michaud, U.S. Patent no. 4,936,070. GB '345 discloses a roofing material comprising a fiber glass sheet which corresponds to the fire resistant material and layer which may be coated on one face with an adhesive which corresponds to the waterproofing layer. The adhesive layer may bond a facing material such as a film layer or other moisture impervious materials. The adhesive may comprise a polyvinyl material which are known to be thermoplastics. The material may be transported in roll form. See p. 3, lines 98 - p. 4, line 95 and page 4, lines 122-126 and figure 6. Since the material may be formed into a roll, it is flexible. GB '345 differs from the claimed invention because GB '345 does not teach applying a filler or resin coating on a portion of the side of the roofing material which will be adhered to the roof. Michaud teaches that the edge portions of roofing materials which will be overlapped in use may be coated with a resin such as an adhesive. See col. 3, lines 27-29. It would have been obvious to have applied an adhesive to the edge portions of the material GB '345. One of ordinary skill in the art would have been motivated to apply an adhesive to the edge portion of GB '345 by the teaching of Michaud that the overlapping edges with the adhesive coating allow for improved waterproofing of the roof. See col. 3, lines 50-52.

8. Claims 10-11, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB '345 in view of Michaud as applied to claims 4-7, 9, 12-13, 18-20 above, and further in view of DE 29,801,546, (abstract). Neither GB '345 nor Michaud teach employing a metal protective layer. DE '546 teaches that metal foil layers can be used as the protective layer for fibrous

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roofing materials. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed a metal foil layer as taught by DE '546 instead of or in addition to the polymer films disclosed in GB'345. One of ordinary skill in the art would have been motivated to employ a metal foil layer because DE '546 teaches that the metal foil layers also provide barrier properties to the roofing material.

9. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 5:00 PM Monday through Thursday.

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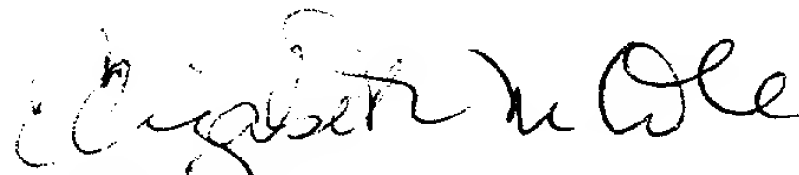
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Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414.

Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for official faxes is (703) 872-9310. The fax number for official after final faxes is (703) 872-9311. The fax number for unofficial faxes is (703) 305-5436.



Elizabeth M. Cole
Primary Examiner
Art Unit 1771

e.m.c

September 3, 2003